

The Department of the Interior
Southwest Climate Science Center,
U.S. Geological Survey



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- Teresa Krause ($\frac{1}{4}$ -time post-doc)

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- Jonathan T. Overpeck (Arizona)
- Alexander Gershunov (Scripps)
- Dan Cayan (Scripps)
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- Glen MacDonald (UCLA)
- Mark Schwartz (UC-Davis)
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- Brad Udall (Colorado State)

University Staff:

- Christine Schirmer: Program & Communications Manager Arizona
- Anita Govert: Business Manager Arizona
- Post-docs (4) and graduate students (2) UCD, DRI, UCLA, SIO





Southwest Climate Science Center

- 16% of U.S. population
- 25% of federal lands
- 25% of DOI lands
- 25% of tribal lands (151 tribes)
- 22% of National Forests

Center Institution

- Hosts
- Partners

River Basins

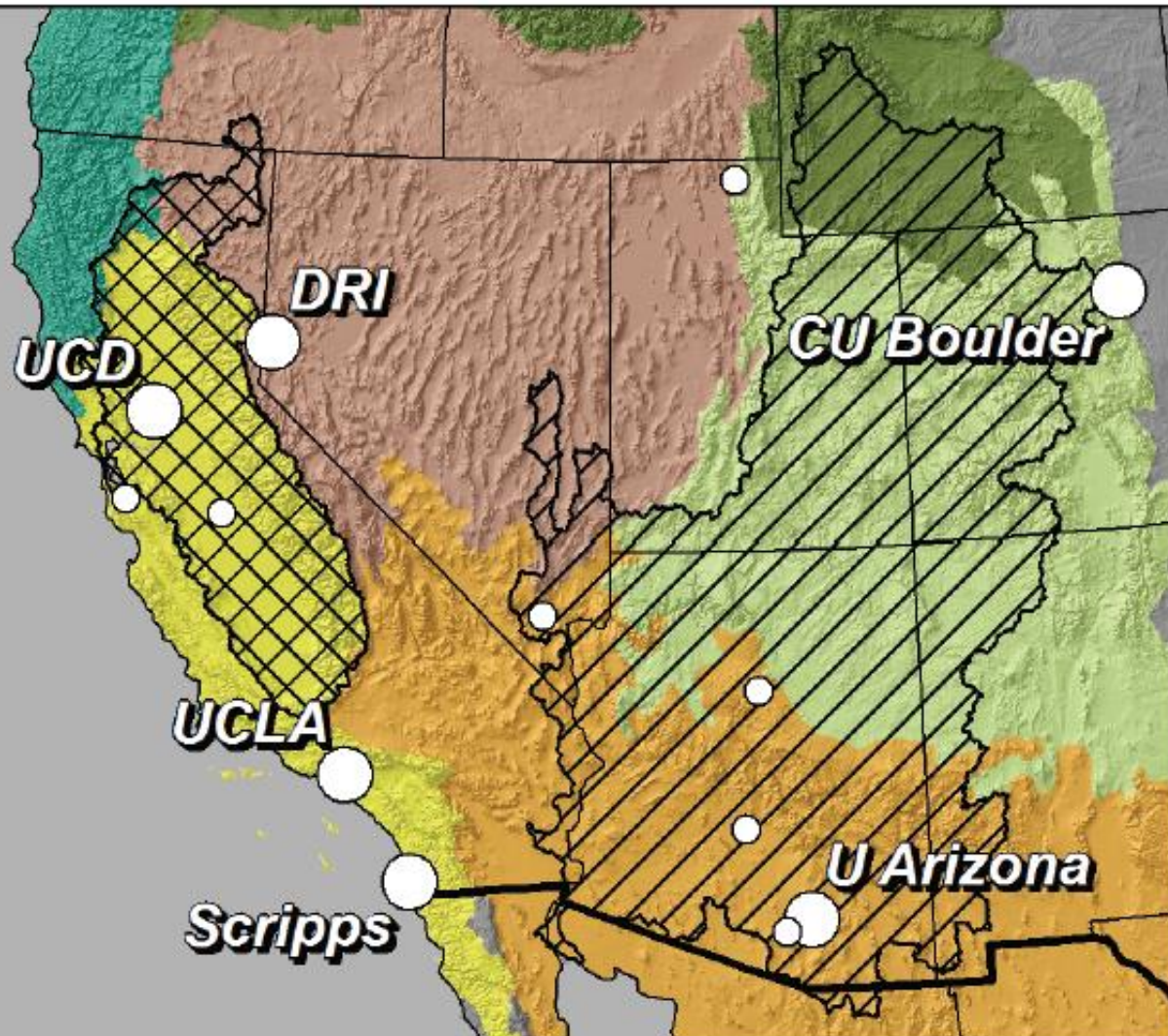
-  Colorado
-  Sacramento-San Joaquin

Landscape Conservation Cooperatives

-  California
-  Desert
-  Great Basin
-  Great Northern
-  North Pacific
-  Southern Rockies



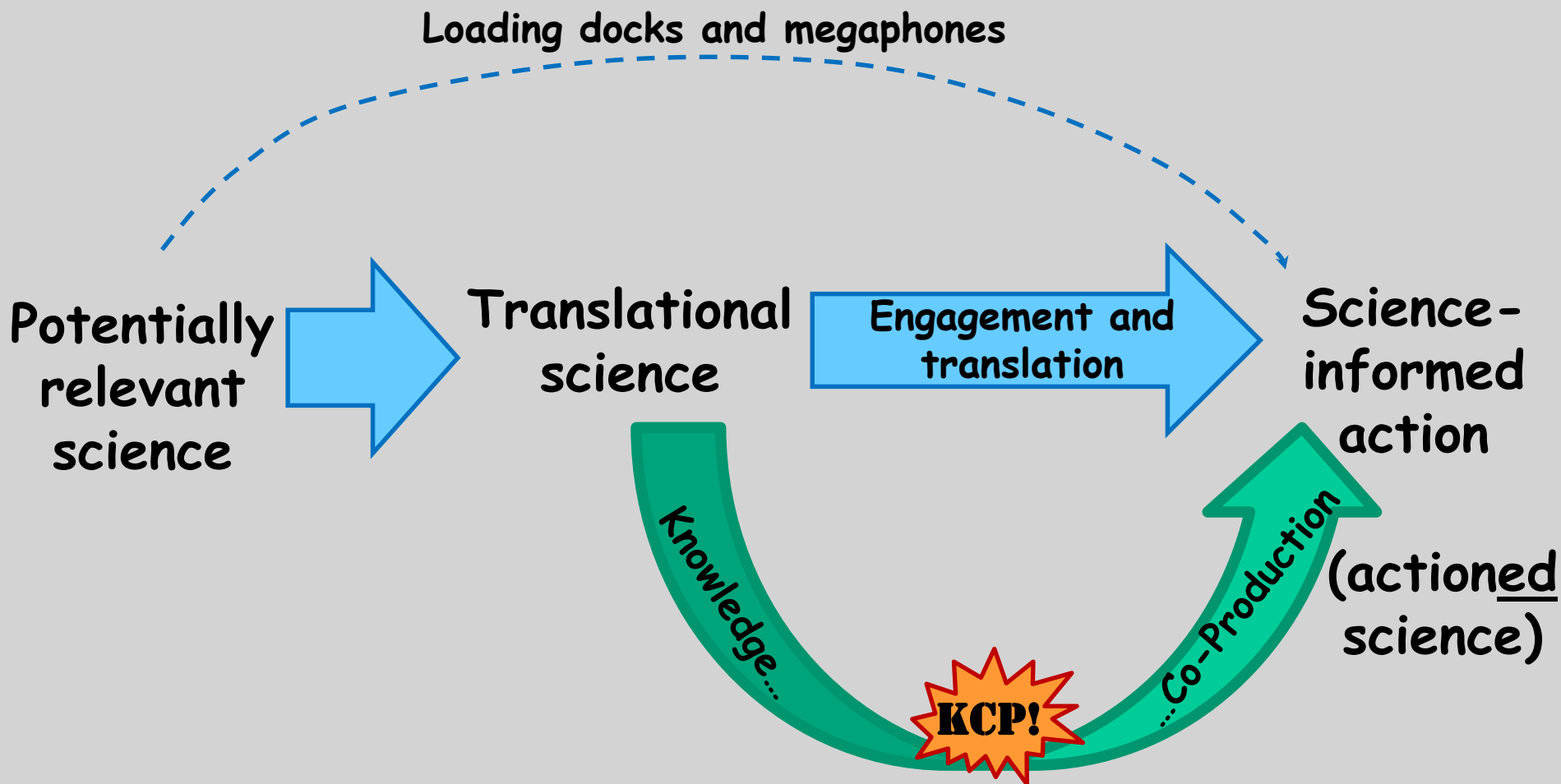
0 250 500
kilometers



- Arid & semi-arid climate = high vulnerability
- High societal dependency on snowpack and rivers
- SW in Year 17 of severe & persistent drought
- 'Novel drought': precipitation deficit PLUS record-high temperatures
- Big impacts, big challenges
 - Bark-beetle mortality (2000s)
 - Physiological mortality (2010s)
 - Severe wildfires
 - Water-resource challenges

Spanning the research/action gap





Key questions:

- What are the most effective translation practices?
- How do we know when we're getting it right?



NCEAS 2015: Translational Ecology Working Group

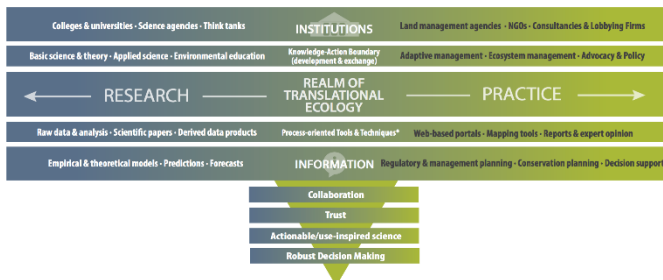


- Ecologists
- Climate adaptation scientists
- Social scientists
- Resource managers



Summer 2017:

- Special issue of *Frontiers in Ecology and the Environment*
- *ESA Symposium & special sessions*



Leveraging capacities at UA and other partners

- **Kathy Jacobs (CCASS)**
 - Scenario planning
 - Tribal adaptation
 - Capacity building

- **Alison Meadow (CCASS) and Tamara Wall (Desert Research Institute)**
 - Identifying effective practices in translational climate science
 - Assessment of research impacts in the decision/action domain

